

August 26, 2021

**MEMORANDUM**

To: Karen Hays, Air Branch Chief

Through: James Boylan, Assistant Branch Chief *KJB*

From: DeAnna Oser, Ambient Monitoring Program Manager

RE: General Coffee March 11- April 4, 2021- Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were collected by the Ambient Monitoring Program at our General Coffee monitoring station March 11- April 4, 2021 using a pressurized sampler. The samples were sent to Eastern Research Group (ERG) for analysis. The Qualifier code of "2" was given to samples to indicate that the collection deviated from established procedures, but the integrity of the sample was not compromised. The Qualifier code of "LK" was given by ERG to indicate that the sample may be biased high. The samples listed as "AR" indicate lab error while analyzing the sample. Please note that ERG is now providing values for levels below the detection limit.

Location	Date	Qualifier	EtO Concentration (ug/m <sup>3</sup> )
General Coffee- Xontech	03/11/2021	2	0.06
General Coffee- Xontech	03/23/2021		AR

Samples were also collected on a passive system for comparison purposes as part of the Community Scales Air Toxics Monitoring Grant awarded to Georgia EPD by EPA for evaluating new technologies for ethylene oxide measurement. These samples were also sent to Eastern Research Group for analysis. Please see discussion above for explanation of codes listed below.

Location	Date	Qualifier	EtO Concentration (ug/m <sup>3</sup> )
General Coffee-Passive	03/11/2021		AR
General Coffee-Passive	03/23/2021	2, LK	0.43

If you have any questions, please let me know.

DGO/do



Eastern Research Group  
601 Keystone Park Drive  
Suite 700  
Morrisville, NC 27560

May 11, 2021

Ms. Jaime Gore  
U.S. Environmental Protection Agency, Region 4  
4244 International Pkwy, Suite 120  
Atlanta, GA 30354  
Project Name: General Coffee

Dear Ms. Jaime Gore,

This report contains the analytical results for the sample(s) received under chain(s) of custody by Eastern Research Group on 03/18/21 13:09 through 04/02/21 11:17.

Values below the MDL for QC results in this report are recorded as ND, however the actual values are reported in the accompanying Excel report with a "U" flag (Under the detection limit). The actual values are reported in AQS.

This test is accredited under the 2016 TNI Standard for Environmental Laboratories (FL DOH Certification # E87673). All analyses were performed as described in the US EPA-approved QAPP, under the contract for UATMP, NATTS, CSATAM, PAMS and NMOC support (US EPA Contract No. EP-D-14-030). This cover page is an integral part of this report, and any exceptions or comments are noted on the last page.

Release of the data contained in this data package and in the data submitted in the electronic data deliverable, has been authorized by the Program Manager, or the Program Manager's designee as verified by the following signature.

The issuance of the final Certificate of Analysis takes precedence over any previous Report. If you have any questions, please contact me at 919-468-7924.

Sincerely,

Julie Swift  
Program Manager  
[julie.swift@erg.com](mailto:julie.swift@erg.com)

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# CERTIFICATE OF ANALYSIS

U.S. Environmental Protection Agency, Region 4  
4244 International Pkwy, Suite 120  
Atlanta, GA 30354  
**ATTN:** Ms. Jaime Gore  
**PHONE:** (404) 362-4912 **FAX:** (919) 541-0516

**FILE #:** 4222.00  
**REPORTED:** 05/11/21 13:14  
**SUBMITTED:** 03/18/21 to 04/02/21  
**AQS SITE CODE:**  
**SITE CODE:** General Coffee

## ANALYTICAL REPORT FOR SAMPLES

<u>SampleName</u>	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
General Coffee	1031827-02	Air	03/11/21 23:59	03/18/21 13:09
General Coffee	1040213-02	Air	03/23/21 23:59	04/02/21 11:17



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AQS SITE CODE:

SITE CODE: General Coffee

Description: General Coffee

Lab ID: 1031827-02

Sampled: 03/11/21 23:59

Pressure @ Receipt: 20.50 psig

Canister #: 18823

Received: 03/18/21 13:09

Comments:

Analyzed: 03/26/21 18:23

## Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.0349	0.06		0.0261



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AQS SITE CODE:

SITE CODE: General Coffee

<b>Description:</b> General Coffee	<b>Lab ID:</b> 1040213-02	<b>Sampled:</b> 03/23/21 23:59
<b>Pressure @ Receipt:</b> 1.00" Hg	<b>Canister #:</b> SAT183	<b>Received:</b> 04/02/21 11:17
<b>Comments:</b> Passive sample		<b>Analyzed:</b> 04/07/21 09:17

## Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m<sup>3</sup></u>		<u>ppbv</u>
Ethylene oxide	0.239	0.43	LK	0.0261



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**SITE CODE:** General Coffee

Analyte	Result	Units	Source Result	RPD	RPD Limit	Notes
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### Air Toxics by EPA Compendium Method TO-15 - Quality Control

*Batch B1C2603 - Summa Canister Prep*

**Blank (B1C2603-BLK1)**

Prepared & Analyzed: 03/26/21

Ethylene oxide	ND	ppbv				U
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*Batch B1D0606 - Summa Canister Prep*

**Blank (B1D0606-BLK1)**

Prepared & Analyzed: 04/06/21

Ethylene oxide	ND	ppbv				U
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**SITE CODE:** General Coffee

Analyte	Result	Units	% Difference	Limit (%)	Notes
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## Air Toxics by EPA Compendium Method TO-15 - Quality Control

*Sequence 2103072*

**Calibration Check (2103072-CCV1)**

Prepared & Analyzed: 03/26/21

Ethylene oxide	2.46	ppbv	-1.8	30.00	
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*Sequence 2104016*

**Calibration Check (2104016-CCV1)**

Prepared & Analyzed: 04/06/21

Ethylene oxide	2.79	ppbv	11.8	30.00	
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## Notes and Definitions

U Under Detection Limit  
ND Analyte NOT DETECTED  
NR Not Reported  
MDL Method Detection Limit  
RPD Relative Percent Difference  
LK Analyte Identified: Reported Value may Be Biased High

Note: This test is accredited under the 2016 TNI Standard; however the following analytes are not accredited: acetylene, bromodichloroethane, dichlorotetrafluoromethane, ethyl tert butyl ether, n-octane, tert amyl methyl ether, trichlorofluoroethane, and bromochloromethane.